



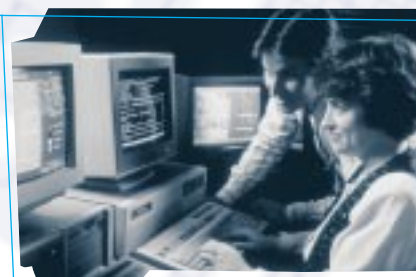
# NEW DIRECTIONS

A REPORT ON REGULATORY REINVENTION

## Harnessing the Power of the Internet EPA Responds to the Rising Public Demand for Environmental Information

**L**ike many other organizations in the public and private sector, EPA is harnessing the power of the Internet to meet the needs of those we serve—in our case, the American public. As evidenced by the rapidly increasing use of our Web site, public demand for environmental information has exploded in recent years. The figure on page 2 shows that more than 30 million users now log-on to EPA's Web site every month. If the growth trend shown in the figure continues, this number could reach 50 million by 2000. In response to this demand, EPA is making more environmental information electronically available and doing so in ways that make it easy for people to understand and use.

Today, citizens can go online and find out about a variety of environmental issues and conditions that affect their lives. Families planning a beach vacation can find out whether the water is safe for swimming. Based on the availability of new compliance information, corporate managers can determine how their company's environmental performance compares to other companies in their industry. Small business owners can access virtual compliance assistance centers to find out about the latest pollution prevention techniques and environmental requirements. And officials at all levels of government can obtain information about environmental conditions and trends in an area prior to deciding what work needs to be done.



Many of EPA's new Web sites allow users not only to receive information but to provide it as well. Environmental and industry groups can provide comments on Agency rulemaking. Citizen volunteer monitors can contribute water quality data based on samples collected in their watershed. Also, as an alternative to the traditional paper-based system, companies are beginning to use the Internet to report environmental data or to apply for permits or product approvals. While these types of transactions are not yet routine, they are being designed, tested, and applied increasingly within Agency programs.

This report highlights some of EPA's newest and most useful Web capabilities. The featured sites represent some of EPA's most important work in expanding public access to environmental information, and creating the more open, inclusive system of environmental protection the Agency envisions for the twenty-first century.

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REINVENTION


# EPA's Home Page

www.epa.gov


The sites featured in this report can be found using the specific URLs provided or by first stopping at EPA's home page. At Administrator Carol Browner's request, EPA's home page was redesigned last year to make it easier for different audiences to use. Our Web statistics show that the information users most frequently request is about laws and regulations, Superfund, and air quality. Sites that allow users to search for information about their community or watershed are popular, too. While the Agency does not have specific information about user groups, feedback from users and a general analysis of Web use patterns indicates that our most frequent users are environmental professionals working as researchers, lawyers, engineers, and consultants, as well as state and local officials and private citizens.

 **EPA** United States  
Environmental Protection Agency

Vice President Gore Announces 14 American Heritage Rivers



**Our Mission:**  
"...to protect  
human health and to  
safeguard the natural  
environment..."



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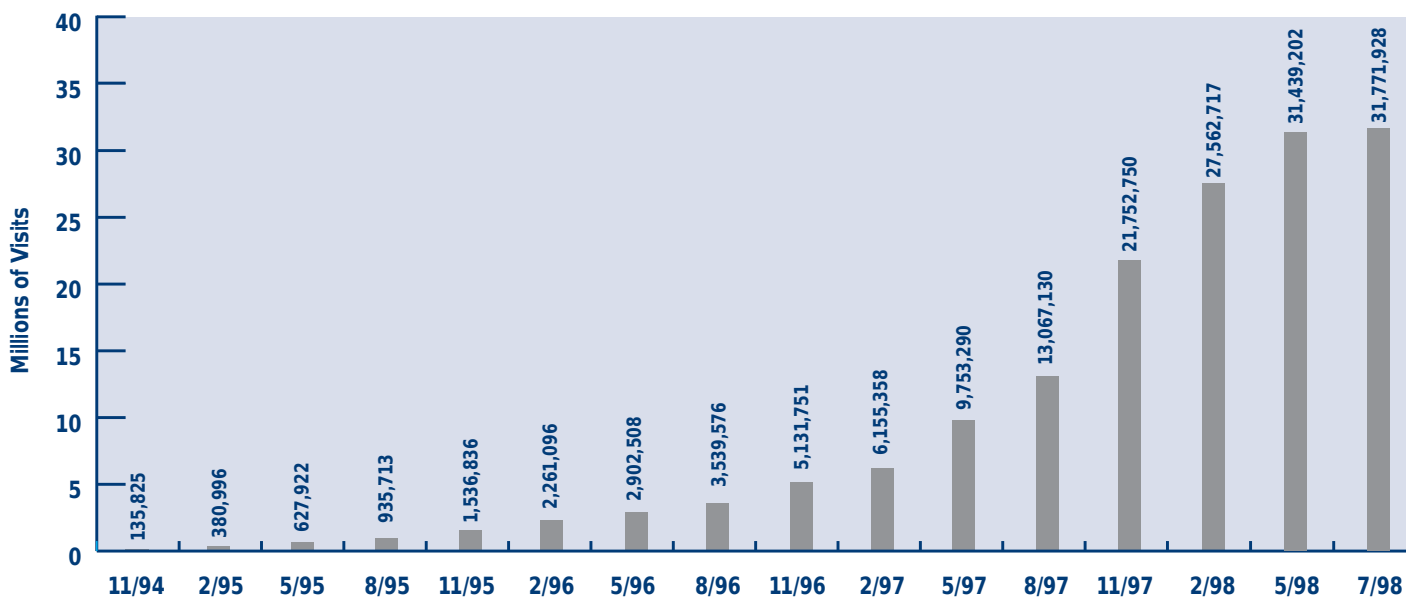
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<http://www.epa.gov/>

By January 2000, EPA projects 50 million hits per month.

## The Growing Demand for Environmental Information Visits to EPA's Web Site



[www.epa.gov/epahome/rules.html](http://www.epa.gov/epahome/rules.html)

The Web site also provides access to the legislation behind EPA's rules. Users can access more than a dozen major environmental laws, such as the Clean Air Act and the Safe Drinking Water Act, that form the legal basis for environmental programs, as well as new legislation proposed within Congress.

- For users interested in final environmental regulations as they appear in the *CFR*, links to the *CFR* Web site provide ready access.



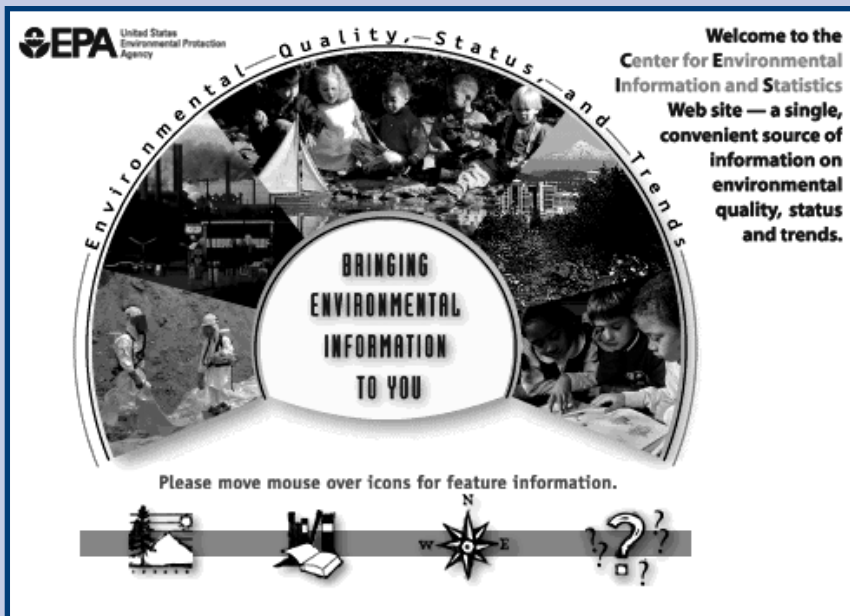
# Center for Environmental Information and Statistics

[www.epa.gov/ceis](http://www.epa.gov/ceis)

EPA's new online Center for Environmental Information and Statistics (CEIS) gives users a single, convenient source of reliable, comprehensive information on environmental quality, status, and trends in their community. For the first time ever, users can request environmental profiles on air quality, drinking water systems, surface water quality, hazardous waste, and reported toxic releases—just by typing in a ZIP code or clicking on a state or county. These profiles are based on data reported to EPA under federal environmental laws.

Because EPA envisioned CEIS as a tool to boost citizens' environmental literacy and capability to act as knowledgeable stakeholders, the Agency conducted extensive customer surveys to find out what kind of information people need and how best to present it. As a result, in addition to learning about environmental conditions in specific areas, users can obtain detailed maps showing the sources of pollution in their communities and the types and amounts of pollutants that have been released. Other features allow users to browse through a digital library of environmental quality reports and maps describing conditions in cities, states, the nation, and other countries. Users also can search electronically through dozens of those reports to get information on a specific place or topic.

More than just a Web resource, CEIS provides information in nonelectronic formats, as well. In the future, CEIS may offer printed maps and reports, telephone access, and additional assistance in both English and Spanish.

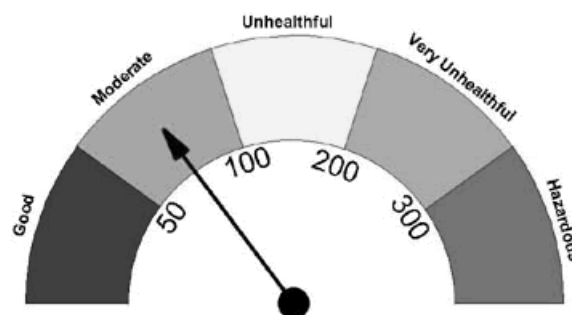


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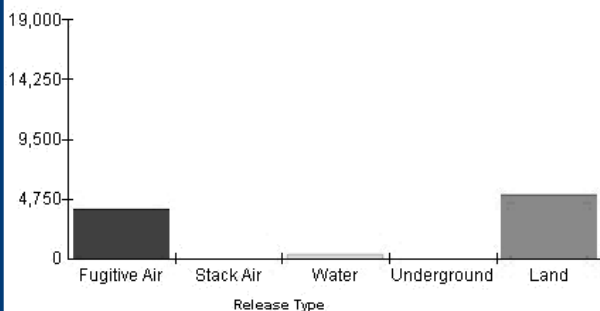
## The Pollutant Standards Index

(a measure of community-wide air quality)

EPA's Pollutant Standards Index (PSI) provides accurate, timely, and easily understandable information about daily levels of air pollution. The Index provides a uniform system for measuring pollution levels for five of six major air pollutants regulated under the Clean Air Act.



Total Reported Releases of TRI Chemicals in District of Columbia for 1996



Source: Toxic Release Inventory System  
[Data Tables](#)

Users can request environmental profiles on air quality, drinking water systems, surface water quality, hazardous waste, and reported toxic releases—just by typing in a ZIP code or clicking on a state or county.

# Community-Based Environmental Protection

[www.epa.gov/ecocommunity](http://www.epa.gov/ecocommunity)



The CEIS Library offers numerous state of the environment reports on geographic areas; the Environmental Atlas offers an ever-growing map collection online.



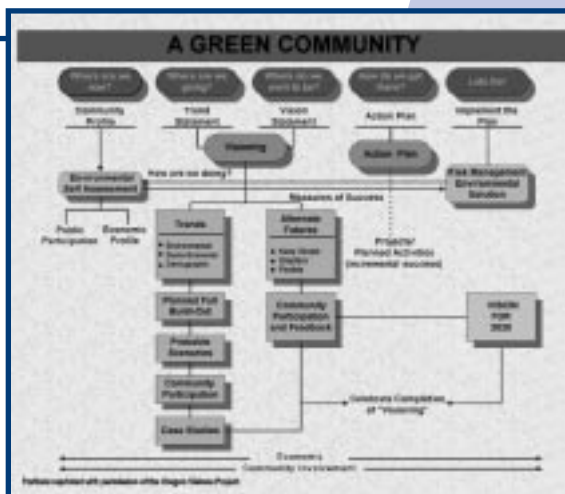
EPA and state agencies have major responsibilities for protecting public health and the environment; however officials and citizens at the local level—those closest to the problems—are taking an increasingly active role in community-based environmental protection (CBEP) efforts. Many of the EPA Web sites highlighted in this publication promote CBEP, offering information and tools that can empower citizens and help communities address environmental, economic, and social

objectives in a more unified manner. The CBEP site is specifically devoted to promoting sustainable ecosystems and communities through an array of tools, resources, case studies, and links to other sites.

One of many tools available through the CBEP Web site is the Agency's online Green Communities Assistance Kit, which has evolved through field-testing in selected communities. The Green Communities kit is designed to help community stakeholders conduct do-it-yourself, integrated community planning. Developing a profile to clarify community conditions, values, and priorities is the first step of this holistic planning process. While its focus is the Mid-Atlantic region, Green Communities contains information that can be applied in communities throughout the United States.

The CBEP site also provides information on grants and other financial tools to help meet the costs of community-based projects—from practical tips for federal grant seekers to descriptions of innovative partnership approaches that can leverage resources to support CBEP efforts.

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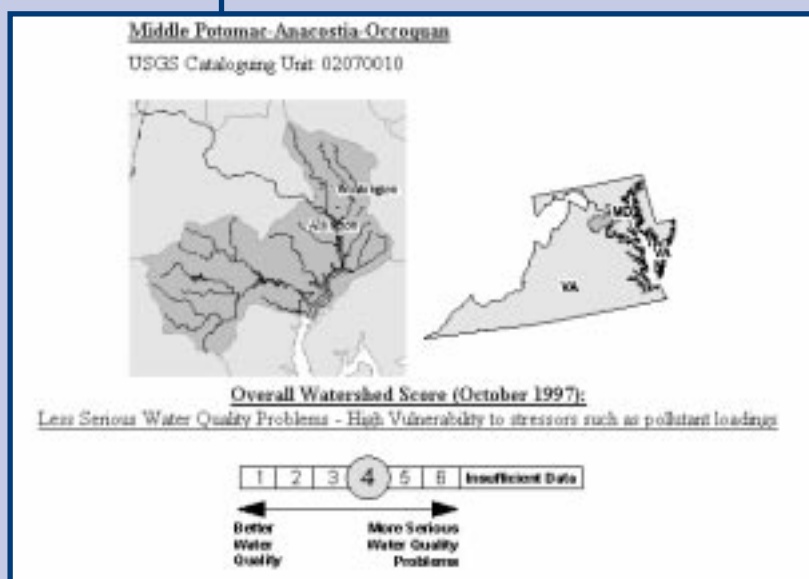


# Surf Your Watershed

www.epa.gov/surf

For a growing number of users, logging on to find out about environmental conditions close to home means looking not at political jurisdictions, but at the boundaries established by nature—watersheds. Increasingly, watersheds are becoming the focus for designing and implementing water quality and habitat restoration activities. Adopt Your Watershed programs are springing up around the country as more citizens are joining local watershed organizations. State environmental agencies are using watersheds as a basis for managing environmental responsibilities, such as permitting and monitoring, more efficiently and effectively. And scientists using geographic information systems are looking at how actions along the upper tributaries of a river affect habitat and ecological conditions in the watershed below.

EPA's multifaceted, information-packed Surf Your Watershed site supports these interests, providing a variety of tools and resources to promote watershed protection. As shown to the right, based on the recently developed Index of Watershed Indicators, users can easily find an assessment of the overall health of their watershed and related information. The index is compiled from 15 indicators of current water resource conditions and the vulnerability to future degradation. A listing of more than 4,000 watershed alliances throughout the nation allows users to locate and participate in local watershed activities, and a special Speak Out feature acts as an information exchange promoting dialogue on watershed issues. As a result of the American Heritage Rivers initiative, users can go to a "yellow page" directory of services that communities can access to support their watershed protection activities.



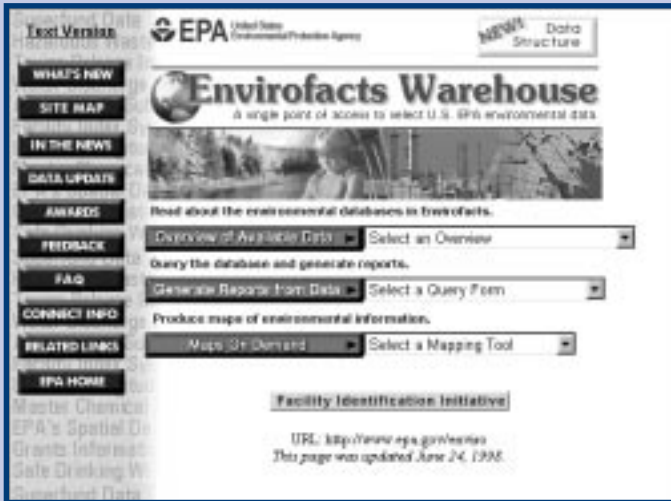
Users can find out how their watershed scores with regard to overall aquatic conditions.

The American Heritage Rivers initiative helps users support watershed protection activities.

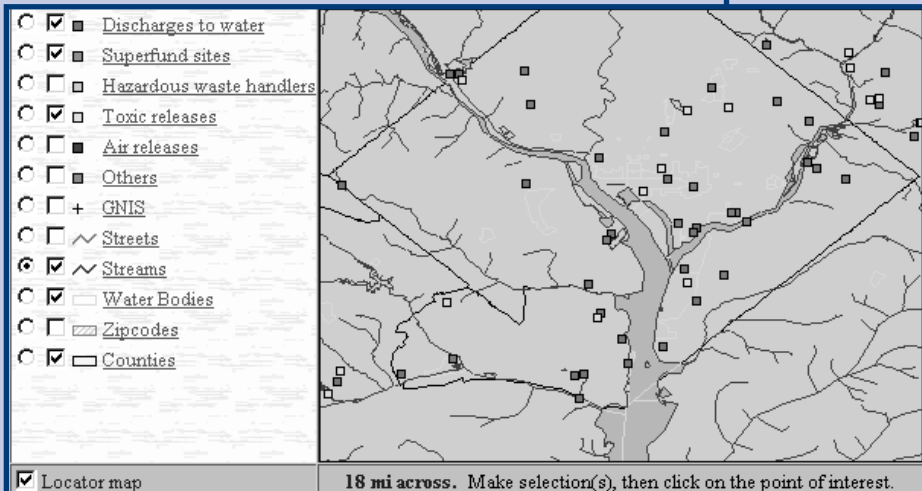


For a growing number of users, logging on to find out about environmental conditions close to home means looking not at political jurisdictions, but at the boundaries established by nature—watersheds.





Using just a few simple query screens, users can search for information by facility name, geographic area (e.g., ZIP code, or state or county name), or chemical substance to obtain the kind of information they want.



One of the most common usages of Envirofacts is obtaining information reported under the TRI.



The site's powerful Enviromapper feature lets users zoom in to any area of the country.

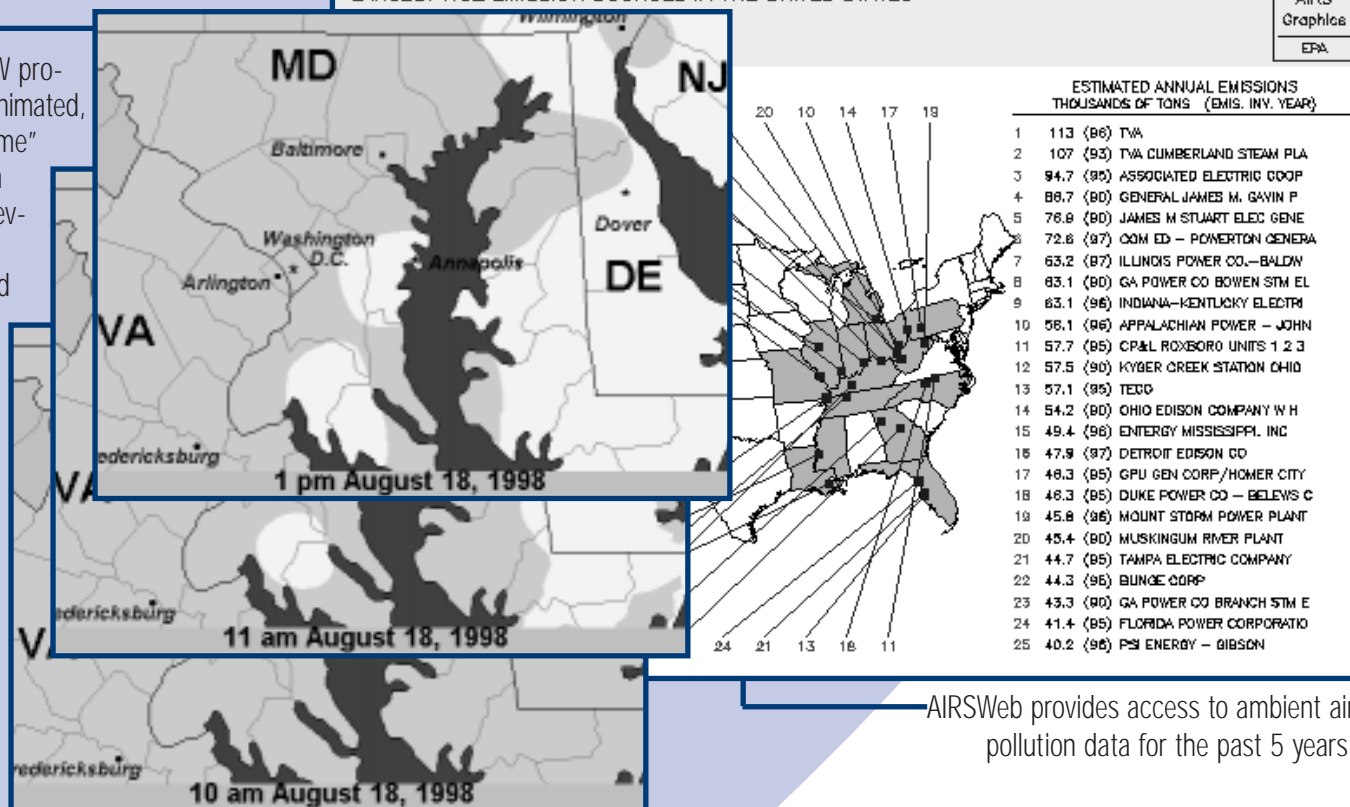
While CEIS is designed to provide users with a better understanding of environmental conditions at the community level, EPA's Envirofacts Warehouse Web site is an online gateway to information drawn from seven EPA databases. Updated monthly based on data submissions required under environmental laws, these separate databases focus on Superfund sites, drinking water, toxic and air releases, hazardous waste and wastewater discharge permits as well as environmental grants information.

Using just a few simple query screens, users can search for information by facility name, geographic area (e.g.,

ZIP code, or state or county name), or chemical substance to obtain the kind of information they want. Query results are presented in either report or map formats. The site's powerful Enviromapper feature lets users click on maps to zoom in to any area of the country and obtain information about regulated facilities or sites. Users also can create maps which are then e-mailed to them in common graphic file formats for later viewing or printing.

One of the most common usages of Envirofacts is obtaining information reported under the Toxic Release Inventory (TRI). The TRI, established under the Emergency Planning and Community Right-to-Know Act of 1986, is the central collection point for information on U.S. facilities' annual estimated releases to the environment of over 300 toxic chemicals. From inception, providing public access was a defining feature of TRI, and its availability continues to represent one of the most important steps the Agency has taken to promote public access to environmental data.

AIRNOW provides animated, "real-time" data on smog levels in selected cities and states.



AIRSWeb provides access to ambient air pollution data for the past 5 years.

## AIRNOW

[www.epa.gov/airnow](http://www.epa.gov/airnow)

- What is the ground-level ozone (smog) level in my city this morning?
- Is a noontime jog a healthy option today?
- What steps can I take to protect my health on bad air days?

EPA's AIRNOW Web site, which provides animated, "real-time" data on smog levels in selected cities and states, offers a glimpse of how these questions may be readily answered online in the future. The site will soon expand to include other air pollutants, health effects profiles of the most common air pollutants, protective steps citizens can take on days when the outdoor air is unhealthy, and what citizens can do to reduce air pollution in their community. With quick access to environmental information that is current and easy to understand, citizens will be able to make day-to-day decisions taking air quality conditions into account.

AIRNOW is one of several pilot projects that are part of EPA's new Environmental Monitoring for Public Access and Community Tracking (EMPACT) Program. By 2001, EMPACT will allow Americans in 86 metropolitan areas to have access to real-time data about air quality as well as other environmental conditions in their community.

## AIRSWeb

[www.epa.gov/airsweb](http://www.epa.gov/airsweb)

While AIRNOW represents a first step toward providing access to real-time environmental data, AIRSWeb provides access to ambient air pollution data for the past 5 years. Updated monthly based on data reported by the states, this site incorporates data from 4,000 monitoring sites across the nation as well as emission levels and compliance status for 9,000 point sources regulated by EPA. Users can see air pollution levels and trends over time for a single facility, a county, or for the entire country. Its mapping capabilities show the locations of major air pollution sources, monitoring sites, and areas of the country where air pollution levels exceed health-based EPA standards. What was the most common air pollutant measured in my county last month? Have conditions improved or worsened over the past five years? Are there major sources of air pollution in my community? EPA's AIRSWeb site is the place to find out.



# BEACH Watch

[www.epa.gov/ost/beaches](http://www.epa.gov/ost/beaches)

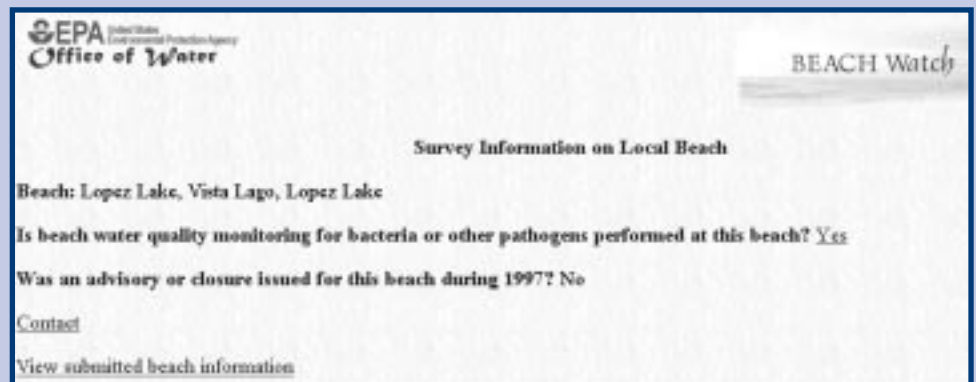
**P**lanning a beach vacation? First, be sure to visit the new BEACH Watch Web site for information about water quality and monitoring activities at over 1,000 beaches around the United States. EPA created this online directory to strengthen beach monitoring and standards programs and to better inform the public about beach water quality. EPA is continuously expanding the site as local agencies contribute beach water monitoring results. BEACH Watch is fast becoming the national hub for information on beach health protection throughout the country. In the future the site may include information for all U.S. beaches, both coastal and on inland waters.

For any beach currently in the database, BEACH Watch indicates whether monitoring for bacteria or other pathogens is performed, and whether an advisory or closure has been issued since early 1997. The frequency of monitoring and the timeliness of reported data vary. More detailed information also is offered about each beach including known sources of pollution, the agency responsible for beach water quality monitoring (if it is being done), how frequently water samples are collected for analysis, how many times water quality criteria were exceeded during the 1997 swimming season, dates and reasons for any advisories and closures since early 1997, and whether the beach is permanently closed. BEACH Watch also offers links to related sites providing current wind, sea, tidal, and weather conditions as well as marine forecasts for the nation's coastal areas and the Great Lakes region.

BEACH Watch is another pilot project supported by EPA's new EMPACT Program. By 2001, EMPACT will allow Americans in 86 metropolitan areas to have access to real-time data about water quality as well as other environmental conditions in their communities.



BEACH Watch provides information about water quality and monitoring activities at over 1,000 beaches across the United States.



For any beach currently in the database, BEACH Watch indicates whether monitoring for bacteria or other pathogens is performed, and whether an advisory or closure has been issued since early 1997.

# Compliance Assistance Centers

[www.epa.gov/oeca/mfcac.html](http://www.epa.gov/oeca/mfcac.html)



To help smaller entities understand what they need to do to comply with environmental regulations—and how pollution prevention approaches can help them boost environmental and economic performance—EPA supports several virtual compliance assistance centers on the Internet.



Unlike major business entities, many small businesses and communities have limited experience and expertise in environmental matters and may need guidance concerning regulatory requirements. To help smaller entities understand what they need to do to comply with environmental regulations—and how pollution prevention approaches can help them boost environmental and economic performance—EPA supports several virtual compliance assistance centers on the Internet. These online centers operate through partnerships with industry, academic institutions, environmental groups, and other federal and state agencies.

Each compliance assistance center is focused on a particular sector. Centers up and running right now serve small businesses in five sectors: metal finishing, printing, automobile service and repair, agriculture, and printed wiring board manufacturing. By fall 1998, four new centers will be serving the transportation, local government, chemical manufacturing, and paint and coating sectors.

The centers provide a wide range of resources that are accessible through the Internet, e-mail discussion groups, fax-back service, or toll-free telephone lines. These services include some or all of the following: easy access to federal regulations, policies, and guidance; information on how to manage or reduce pollution in the context of specific processes; access to pollution prevention and compliance technology vendors; and case studies of innovative technology uses and pollution prevention efforts.

# Sector Facility Indexing Project (SFIP)

[www.epa.gov/oeca/sfi](http://www.epa.gov/oeca/sfi)

**A**re industries and specific facilities complying with environmental requirements? That answer can be found through the Sector Facility Indexing Project (SFIP) Web site, which integrates and provides public access to environmental compliance data. In its pilot phase, SFIP profiles approximately 650 facilities in the following five industrial sectors: automobile assembly; pulp manufacturing; petroleum refining; iron and steel production; and aluminum, copper, lead, and zinc (nonferrous metals) primary smelting and refining.

The SFIP site allows users to look at recent environmental data about each facility, such as the number of inspections the facility has received, its record of compliance with federal regulations, its chemical releases and spills, and other related data. SFIP also includes background data on the location and production capacity of each facility as well as information on the population of the surrounding area. SFIP can be used for different purposes. Local residents can look up a particular facility in their community, for example, to check on its compliance and enforcement history. Industry engineers can compare a facility's performance against their competitors, and environmental officials can make cross-media comparisons that were not possible before this information was brought together.

In its pilot phase, SFIP is allowing EPA to gauge the level of public interest in examining records about industry compliance with environmental laws and is helping the Agency study whether increased public access to data provides an additional incentive for companies to improve or maintain good environmental performance. SFIP is an iterative process in which improvements will be made over time. Based upon an evaluation of this pilot, EPA hopes to expand this site in the future to include additional industry sectors and data.

Aggregate Data Summary: Pulp Manufacturing											
<p>The following tables present the average values calculated for the facility-specific indicators generated and compiled by SFIP. For example, of the 247 Pulp Manufacturers included within the SFIP database, an average of 5.8 inspections (Air, Water, RCRA) were conducted over the last eight quarters. In 1993, pulp manufacturers released an average of 1,047,693 pounds of TSL chemicals of which 100,114 pounds were carcinogens. For a definition of any of the facility-specific indicators listed in the table below, click or select the highlighted header.</p>											
Inspections (2 years)				Chemical Noncompliance (Quarterly periods with 1 or more violations or noncompliance events)				Permit Exceedances - Clean Water Act (2-year data)			
Air	Water	RCRA	Total	Air	Water	RCRA	Total	# of Exceedances from CWA	# of Exceedances from CWA	# of Exceedances from CWA	# of Exceedances from CWA
0.0	0.0	0.0	0.0	1.1	1.0	0.0	0.0	1.0	0.0	0.0	0.0
Current Significant Noncompliance Indicators				Closed Enforcement Actions (2 years)							
Air	Water	RCRA	Total	Air	Water	RCRA	Total				
% of Facilities	% of Facilities	% of Facilities	% of Facilities	% of Facilities	% of Facilities	% of Facilities	% of Facilities				
10.0%	10.0%	10.0%	10.0%	0.0	0.0	0.0	0.0				
Production Capacity		TSL Releases		TSL Releases Transferred		Ratio of Chemicals Released & Transferred to Capacity		TSL Releases - Carcinogens			
Short Tons/Calendar Year		1992 - 1993		1992 - 1993				Pounds			
1,000		1,047,693		100,114				1,047,693			

Significant Noncompliance Indicator				Enforcement Actions Taken - 2 Years			
Air	Water	RCRA	A+W+R	Air	Water	RCRA	Total
Y	N	N	1	2	0	0	2
N	Y	N	1	0	1	0	1
N	N	N	0	0	0	0	0
N	N	N	0	0	0	0	0
Y	N	N	1	0	0	0	0
N	N	N	0	1	1	0	2
N	N	N	0	0	0	0	0
N	N	N	0	0	0	0	0
N	N	N	0	0	0	0	0
Y	Y	N	2	0	1	0	1
N	N	N	0	0	2	0	2
N	N	N	0	0	0	0	0
N	N	N	0	0	0	0	0

Users can find out about compliance for entire industry sectors or for individual facilities.

The SFIP site allows users to look at recent environmental data about each facility, such as the number of inspections the facility has received, its record of compliance with federal regulations, its chemical releases and spills, and other related data.



# EPA's Kids' Page

[www.epa.gov/kids](http://www.epa.gov/kids)

**Y**ou're never too young to start learning about the environment. Now learning is interesting and more fun than ever at the Explorers' Club, EPA's Web site for kids. Kids ages 5 to 12 are invited to actively explore the environment and learn about the actions they can take to protect it. There are pictures, stories, animated games, and other features designed to teach young children about environmental issues. These interactive features involve kids in identifying environmental problems, cleaning up pollution, and protecting the environment now and in the future. Kids also can ask EPA questions about environmental topics and make suggestions about ways to improve the club. As a resource for introducing environmental issues to young Internet users, the Explorers' Club has been highlighted in major publications, including *Better Homes and Gardens* and

## *Healthy Kids Magazine.*

Older kids are invited to check out the Student Center for middle and high school students. The center provides a variety of information such as environmental terms, laws, and issues; news items; information on protecting air, water, health, eco-systems, and communities; plus environmental clubs and careers. The Teachers' Lounge provides a wealth of environmental education resources, including guides, curricula,

grant information, and links to other environmental education resources outside EPA.



## FOR MORE INFORMATION

about EPA's information management reforms or reinvention activities in general, contact EPA's Office of Reinvention at **202 260-1849**. Or look for more information on the Internet at [www.epa.gov/reinvent](http://www.epa.gov/reinvent). You'll find special reports, remarks from senior Administration and Agency officials, detailed fact sheets, and much more.



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